

Summary of Research



**Montana Fish,
Wildlife & Parks**

Highlights From the 2003 Montana Resident License Fee Study

RMU Research Summary No. 17

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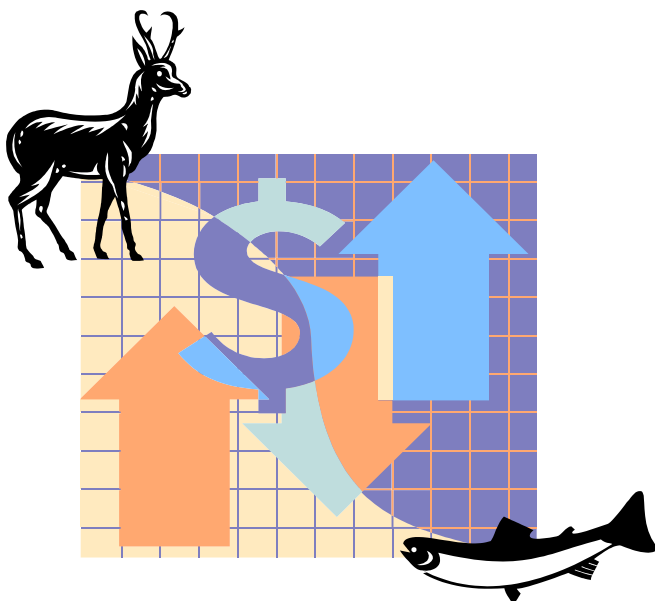
When the Montana Legislature made the decision to increase nonresident hunting and fishing license fees in 2001, lawmakers also directed Montana Fish, Wildlife & Parks (FWP) to evaluate resident fees. In response to this request, among other things, FWP conducted a 2003 Montana Resident License Fee Study. The goals of this study were to:

1. Examine Montana's current and historic license prices.
2. Compare Montana's resident license fees with those in neighboring western states.
3. Evaluate how a resident fee increase would affect license sales and revenue.
4. Survey resident hunters and anglers to collect information on their willingness to pay higher fees.

This research summary highlights the key findings from this study. In addition to this research summary, a more detailed report of the study results is available from FWP (Brooks et. al., 2004).

EXAMINING MONTANA'S RESIDENT PRICING HISTORY

Data on the number of resident licenses sold and their prices was collected for the time period 1970-2000. The time series data showed that prices for the elk, deer, antelope, upland game bird, and fishing licenses were raised 3-6 times during this 30-year period. Most of the increases were relatively small and did not result in reduced sales. In some cases the quantity sold increased when the price was increased. However, license sales did decrease when a significant price increase occurred, but sales generally rebounded over a period of time.



In real terms (constant year 2000 dollars) resident license prices were highest in the mid-1970's (at about \$20 for a deer license and \$24 for an elk license). This compares to the current price of \$13 for the deer license and \$16 for the elk license.

COMPARING MONTANA'S RESIDENT LICENSE FEES WITH THOSE IN NEIGHBORING WESTERN STATES

Comparing Montana's resident hunting and fishing licenses to other western states revealed that Montana's hunters and anglers pay 35-55 percent less than their counterparts in neighboring western states. What this means is that resident hunters and anglers in Montana enjoy the least expensive elk, deer, antelope, upland game bird, and fishing licenses across the west.

EVALUATING THE POTENTIAL AFFECTS OF A RESIDENT FEE INCREASE ON LICENSE SALES AND REVENUE

Demand models, which made use of the historical data on the number of resident licenses sold and their prices for the time period 1970-2000, were used to evaluate how a resident fee increase would affect license sales and revenue. The demand models provided estimates of price elasticity and in all cases (e.g., for the elk, deer, antelope, upland game bird, and fishing licenses) the prices were inelastic, meaning that for a given percentage price increase there would not be a corresponding percentage decline in sales. That is, the change in sales would be less than the change in price.

These models also were used to calculate the effects of price changes on total revenue. The results of the study revealed that because Montana's hunting and fishing fees are "price inelastic", revenues will generally increase with changes in price.

MEASURING RESIDENT HUNTER'S AND ANGLER'S WILLINGNESS TO PAY HIGHER FEES

FWP surveyed Montana hunters and anglers in 2003 to measure their willingness to pay higher fees. Surveys of resident elk, deer, antelope, upland bird, and fishing license buyers were administered during the spring and fall of 2003. A primary focus of these surveys was to collect information regarding hunters' and anglers' willingness to pay more than what they currently pay for these licenses.

A dichotomous choice contingent valuation format was used to gather data about respondents' willingness to pay higher

fees. This format provided a short explanation about the current price of the license in question and then asked:

If the price of the _____ license increased from \$CURRENT PRICE to \$XXXX, would you still have purchased this license to hunt?....YES or NO

Eight different fee amounts (e.g., \$XXXX) were randomly assigned across the sample for each different survey (which varied depending on the license type). This data was then used to calculate an estimated average value for the license type in question.

The survey results demonstrate that resident hunters and anglers are willing to pay higher fees than what they currently pay. The average prices resident hunters were willing to pay for the deer and elk licenses were around \$24 and \$32, respectively. The average prices they were willing to pay for the antelope and upland game bird licenses were around \$24 and \$22, respectively. And, the average price resident anglers were willing to pay for the fishing license was a little more than \$28. Overall, these results show a majority of resident hunters and anglers are willing to pay significantly more for the opportunity to hunt and fish in Montana.

DISCUSSION

FWP is currently facing a budget dilemma. For several years after the last general resident fee increase was approved by the Montana Legislature in 1991, FWP built up a budget surplus. Through careful fiscal management, FWP stretched that surplus five years longer than expected in part by keeping expenditure growth between 1996 and 2003 below the rate of inflation. However, the current level of services cannot be sustained indefinitely with resident license prices that were set 14 years ago.

To solve this dilemma, FWP is proposing a resident fee increase that would go into effect starting March of 2006. The proposed resident fees would boost FWP revenues by about \$4.6 million a year. Some of the proposed resident fee increases are as follows:


| <u>License Type</u> | <u>Current Price</u> | <u>Proposed Price</u> | <u>Average Willingness To Pay*</u> |
|---------------------|----------------------|-----------------------|------------------------------------|
| Elk | \$16 | \$25 | \$32 |
| Deer | \$13 | \$20 | \$24 |
| Antelope | \$11 | \$20 | \$24 |
| Upland Game Bird | \$6 | \$20 | \$22 |
| Fishing | \$13 | \$20 | \$28 |

*Average willingness to pay from the 2003 surveys of Montana hunters and anglers.

How did FWP decide on the proposed new prices for resident licenses? First, FWP conducted surveys of Montana hunters and anglers in 2003 to estimate their willingness to pay higher fees. Results of these surveys, which are outlined in this research summary, showed that the majority of survey respondents were willing to pay more. Next, FWP multiplied the current prices of Montana's resident licenses by the rate of inflation since 1994, when the current fees took affect. FWP compared these prices (adjusted for inflation) to: (1) rates in neighboring states, to make sure Montana still has the lowest fees in the region, and (2) with the results of the survey of resident hunter's and anglers' average willingness to pay, to make sure they were not over-pricing licenses. Lastly, FWP rounded the fees off to whole numbers to keep the pricing simple and applied significant discounts for youth, seniors, persons with disabilities and combination licenses to keep hunting and fishing affordable, while still generating the revenue needed to sustain programs through 2011.

Online information and opportunities to comment on the resident fee proposal are available now at:

www.fwp.state.mt.us/feeproposal.asp

FWP will present the resident fee proposal, and seek comments on alternatives, at a series of public meetings that will be scheduled during the fall of 2004 and winter of 2005. Ultimately, the 2005 Montana Legislature will decide on whether or not to approve a resident fee increase 

LITERATURE CITED

Brooks, R., J. Duffield and C. Neher. 2004. *Montana Resident License Fee Study, A Descriptive and Empirical Analysis of Selected Resident License Fees*. Technical report submitted to the Director's Office of FWP by the Responsive Management Unit of FWP. Helena, MT: Responsive Management Unit, Montana Fish, Wildlife & Parks.

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